

# **Diversity | Inclusion | Community | Excellence**

bioscience.ucla.edu Fall 2017

# Graduate Programs in Bioscience

Graduate Programs in Bioscience is a consortium of 10 Home Areas and their affiliated PhD programs, organized to provide the best possible research training and professional development for graduate students pursuing PhDs in the life and biomedical sciences. Students are offered the flexibility to pursue their interests across the wide range of bioscience fields. At the same time, they benefit from individually tailored education in smaller training communities, defined by today's research themes, not traditional departments.

#### **Home Areas**

- Biochemistry, Biophysics & Structural Biology
- Bioinformatics
- Cell & Developmental Biology
- Gene Regulation
- Genetics & Genomics
- Immunity, Microbes & Molecular Pathogenesis
- Molecular, Cellular & Integrative Physiology
- Molecular Pharmacology
- Neuroscience
- Physics & Biology in Medicine

#### 2017 Eugene V. Cota-Robles Fellowship Recipients

UCLA Graduate Programs in Bioscience is committed to diversity and inclusion. Our commitment is central to cultivating a community that nurtures creativity and intellectual curiosity. These core values enhance research training and promote research innovation. In this edition of our newsletter, we proudly celebrate students who received the prestigious Eugene V. Cota-Robles Fellowship. These students recently completed their first year of training and are shining examples of the diverse talent in the UCLA bioscience community.



# **Aracely Acevedo**

**UCLA Home Area:** Molecular, Cellular & Integrative Physiology

Master's Institution: CSU Los Angeles
Undergraduate Institution: UC Santa Cruz
Community College: Pasadena City College
Research Programs: NIH MBRS RISE, NIH IMSD

Aracely's Master's research experience cemented her passion to conduct biomedical research with a direct application to treating human diseases. The cardiovascular research conducted at UCLA drew her to the MCIP PhD program. Aracely is now in the Eghbali lab investigating the potential role of Intralipid (a safe fat emulsion) as a novel therapeutic for treating late-pregnant women who are vulnerable to myocardial infarction. "Always be patient, persistent, and passionate in your research!"



# **Sandy Alvarez**

UCLA Home Area: Cell & Developmental Biology Master's Institution: CSU Los Angeles Undergraduate Institution: UC Irvine Research Programs:NIH IMSD, NIH MARC, NIH MHIRT, MBRS RISE

Sandy's experience as a Master's student had a huge impact on her development as a scientist and honed her understanding of independent research. At UCLA she investigates the molecular mecha-

# Meet our Associate Director for Recruitment & Inclusion

Dr. Diana Azurdia



Diana leads UCLA's effort to enhance diversity in the biomedical graduate student population. She earned her PhD in Molecular Biology & Biochemistry from UCLA and she graduated with a BS in Biochemistry from CSU Los Angeles. Diana is a first-generation Guatemalan-American and the first in her family to attend college. She credits much of her success to the influence of her mentors, who have shaped her focus on the propagation of effective mentoring of underrepresented individuals in STEM.

# Fall 2017 Enrollment Facts

Total enrollment81
California residents44
Out-of-State students22
International students15
From underrepresented backgrounds21 (26%)

nisms underlying netrin-mediated axon guidance and circuitry formation during nervous system development in Dr. Samantha Butler's lab. "This past year I've come to realize that it's okay to not be 100% sure of what it is that we are interested in studying. While it's fantastic to have a sense of direction, I think it's important to come in to the program with an open mind in terms of research interests."



#### Yesenia Cabrera

UCLA Home Area: Neuroscience
Undergraduate Institution: CSU San Marcos
Community College: Palomar College
Research Programs: NIH MARC, NIH Bridges

As a graduate student, Yesenia is trained by Dr. Gina Poe to study sex differences in the role that sleep

plays in affecting fear, learning, and memory. This year, she is looking forward to being immersed in her dissertation research and pushing herself to become a successful scientist. "I was attracted to UCLA because of the supportive and collaborative atmosphere, which is clearly driven by the shared desire to further scientific discovery as well as a sense of social responsibility."



# **Bao Ying Chen**

UCLA Home Area: Physics & Biology in Medicine Undergraduate Institution: Grinnell College Research Programs: Leadership Alliance SR-EIP

At UCLA, Bao Ying calls Dr. Peter Clark's lab home and is conducting research on non-invasive monitoring of stem cell derived human hepatocyte homing

and engraftment in vivo using Positron Emission Tomography (PET). During her first year of graduate school, Bao appreciated the support of her UCLA classmates and professors. "The answer is there. It's how we approach it that is debatable. But that's what science is."



#### Daniel Johnson, Jr.

UCLA Home Area: Bioinformatics
Undergraduate Institution: Morehouse College
Research Programs: UCLA Big Summer, NIH REU

Daniel worked at the NIH biomedical communications center on porting semantic Medline to mobile devices, which exposed him to Bioinformatics and

illustrated the applicability of his computational skills to solve biological and medical problems. Today, he conducts research in Dr. Alex Bui's lab, on tumor classification and stratifying image features in Computerized Tomography (CT) scans to improve the detection of lung nodal malignancy.



#### Nyasha Marforo

UCLA Home Area: Physics & Biology in Medicine Post-baccalaureate Program: Univ. of Chicago Undergraduate Institution: Fort Hays State Univ.

Research Programs: NIH PREP

As a PREP scholar, Nyasha received mentorship that prepared her for graduate school, broadened her

knowledge of medical physics, and strengthened her research skills. As a graduate student, Nyasha works in Dr. Daniel Ennis' lab on the characterization of cardiac microstructure using diffusion weighted MRI. "I was attracted to UCLA because it has world-class imaging facilities for pre-clinical and clinical MRI research. Ultimately, it was the the people and collaborative atmosphere I saw at UCLA that was unlike any other institution. I knew that UCLA was a place I could call home."



#### Carissa Pardamean

**UCLA Home Area:** Molecular & Medical Pharmacology

Master's Institution: Boston University
Undergraduate Institution: UC Berkeley
Research Programs: UC Berkeley Summer
Undergraduate Research Fellowship

Prior to graduate school, Carissa worked as a data scientist in industry—an experience that highlighted the value of big data in biomedical research and developed her skills in data analysis and interpretation. Carissa is currently working in Dr. Ting Ting Wu's lab, where she is supported by a NIH T32 training grant. Her work examines the molecular mechanism of Kaposi Sarcoma-associated herpesvirus (KSHV) targeting of cellular mRNA export. Carissa shares this quote from the novel *The Double* by José Saramago: "Chaos is merely order waiting to be deciphered. It's one of those little things I'd remember to keep me going in the messy, unpredictable world of biomedical research."



# Alejandra Rios

**UCLA Home Area:** Physics & Biology in Medicine

Master's Institution: CSU Los Angeles

**Undergraduate Institution:** CSU Los Angeles

Research Programs: Caltech MURF Summer Program

Alejandra's Master's research combined her physics background with an engineering approach to tackle

medical problems. She enrolled in the Physics & Biology in Medicine PhD program at UCLA to continue interdisciplinary research. Currently she is in Dr. Mike van Dam's and Dr. Saman Sadeghi's lab studying the development of a microfluidic electrochemical synthesis platform to enable late-state fluorination of bioactive molecules. "I know that the Physics & Biology in

#### **Bioscience PhD Facts**

#### Research Excellence

UCLA is among the nation's top recipients of research funding (over \$1B awarded in 2016-2017).

#### Opportunity

Over 400 members of the basic science and clinical faculty are potential mentors to students in the program.

#### Flexibility

Students can rotate with any Bioscience faculty member, provided one rotation is in their Home Area, and they can change Home Areas if evolving research interests dictate.

#### Support

All PhD students receive full financial support during the course of their study, including a living allowance (\$32,500 in 2017-18), all tuition and fees, and student health insurance.

# Bioscience-Wide Training Opportunities

#### **Maximizing Student Success**

Workshops designed to help incoming Bioscience students acclimate and thrive during the first year of their graduate education. Sessions provide students with strategies for effectively integrating into PhD programs, and labs, as well as a space for sharing experiences with peers and building community.

#### "Get Connected" Events

A quarterly curated list of events designed to enrich the academic experiences of graduate students through career and professional development.

#### **Entering Mentoring Program**

Mentorship, leadership, and diversity sensitivity training for graduate students and post-doctoral trainees. Medicine program at UCLA will take me one step closer to my goal to be an independent researcher and academic professor by creating innovative technology and inspiring new generations of students about the wonders of nature and scientific exploration."

#### **Lauren Thurlow**

UCLA Home Area: Biochemistry, Biophysics &

Structural Biology

**Undergraduate Institution:** Loyola Marymount Univ **Research Programs:** McNair Scholars and Amgen Scholars

Lauren's undergraduate experience helped her understand how to work on a research team alongside graduate students and postdocs and gave her a taste of what it's like to be a PhD student. Now, in a PhD program, Lauren investigates the epitranscriptional regulation of the chromatin remodeler Snf2 during meiosis in *S. cerevisiae* under the supervision of Dr. Tracy Johnson. "During the first year of graduate school, be a sponge and absorb as much of the information being thrown at you as you possibly can. You're not expected to know everything. Surround yourself with people who inspire you and are passionate about science."



# Tyler James Wishard

UCLA Home Area: Neuroscience

Undergraduate Institution: UC San Diego

Research Programs: NIH MARC

As an undergraduate, Ty learned that research progress can be slow and that it requires meticulous attention to detail and, often, a bit of luck. Now, in the

lab of Dr. Nanthia Suthana, he investigates circuits for learning and memory. More specifically, he examines how brain structure changes during aging and is enhanced with neuromodulation. "Curiosity is what drives me, I am interested in creating novel ways to answer questions we don't know the answer to. One of the things I love about science is that there really isn't an ending, there are always additional questions you can ask; it's an exciting field to be in!"

Visit Us



Booth #400



November 2017 Booth #611

# Undergraduate Summer Research

SPUR-LABS

Applications due: February 1, 2018

The UCLA SPUR-LABS summer program provides a rigorous research training experience for undergraduates with interests in a broad range of bioscience disciplines. Exceptional research training, integrated with professional development activities, will prepare students to succeed in leading PhD and MD/PhD programs.

Website bioscience.ucla.edu/spur-labs

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